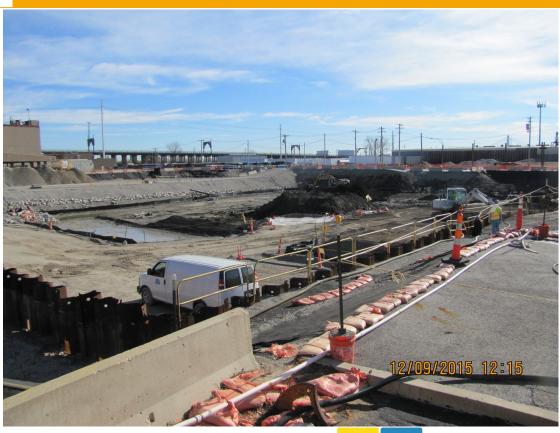


FORMERLY UTILIZED SITES REMEDIAL ACTION PROGRAM OVERSIGHT AND MONITORING COOPERATIVE AGREEMENT

4th Quarter: October Through December 2015 Report





Missouri Department of Natural Resources

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COVER PHOTO: St. Louis Downtown Sites - Soil excavation at Plant 6/building 101. This work is currently expected to be completed mid-2016.

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St. Cin Park in Hazelwood - Additional excavation in the basketball court area. USACE contractors continued excavating several areas within the park after additional sampling identified adjacent areas that required remediation. USACE expects to complete remediation in the park during the first calendar quarter of 2016. The City of Hazelwood has closed the park to the public until remediation is completed.

History of the Formerly Utilized Sites Remedial Action Program Sites

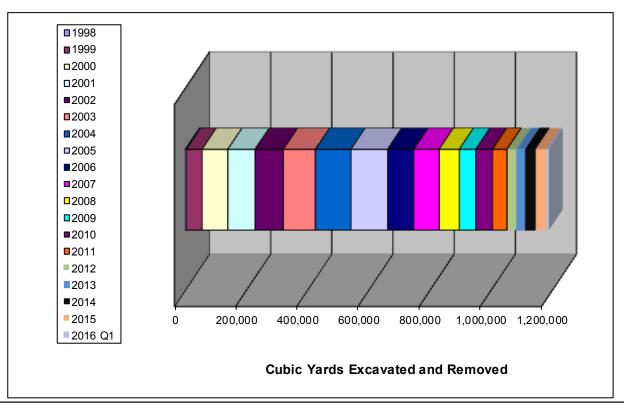
The St. Louis Downtown Site (SLDS) processed uranium for the nation's early atomic energy program. In 1946, the U.S. Department of Energy's (DOE) predecessor agencies began utilizing the St. Louis Airport Site (SLAPS) as a storage area for radioactive wastes and processed residues, the majority of which originated at the SLDS. Methods of storage at the SLAPS included both uncovered bulk storage piles and materials containerized in drums. In 1966 the materials at the SLAPS were sold by the Atomic Energy Commission (AEC) and were shipped to a facility at 9200 Latty Avenue (Futura), where the majority of the material was dried and shipped to out-of-state processing facilities. 8,700 tons of radioactively contaminated barium sulfate processed waste were mixed with 39,000 tons of soil and disposed of at West Lake Landfill in 1973. (West Lake Landfill is being addressed separately from the FUSRAP.)

Processing, transportation, storage, and management practices during the above-stated period led to the contamination of the three major FUSRAP sites: SLDS, SLAPS, and the Hazelwood Interim Storage Site (HISS)/Futura, with the latter two sites being placed on the National Priorities List (NPL) in 1989. In addition, approximately 78 contaminated vicinity properties have been identified as SLAPS Vicinity Properties (VPs).

On Oct. 13, 1997, the Energy & Water Appropriations Bill transferred the responsibility for the remediation of FUSRAP properties from the DOE to the U. S. Army Corps of Engineers (USACE). The total volumes of contaminated soils, sediments and debris at St. Louis FUSRAP sites were estimated to have been about 1.1 million cubic yards. USACE has already excavated more soil than was originally estimated.

Status of Work Completed This Quarter by USACE

MAJOR AREA	SPECIFIC SITES	WORK DESCRIPTION	
North County (NC)	SLAPS Vicinity Properties	Remediation work at St. Cin Park along Coldwater Creek continued. Sampling of Coldwater Creek between Frost and St. Denis Bridge continued, including additional sampling at Cades Cove and some other residences and businesses along the creek. Sampling of residential lawns in the St. Cin Park area continued. The volume of soil removed from the vicinity properties this quarter was about 1,990 yd ³ .	
North County (NC)	HISS/Futura and Latty Ave. Vicinity Properties	Most remediation work has been completed and no additional soil or debris was shipped during the quarter.	
Saint Louis Downtown Sites (SLDS)	Saint Louis Downtown Site and Vicinity Properties	Building 101 excavation at Plant 6 West Half continued during the quarter. Additional sampling for a remedial investigation addendum for the SLDS was being considered. The volume of soil removed from SLDS in this quarter was about 6,307 yd ³ .	
NON-SITE SPECIFIC		Six utility support operations were undertaken by the USACE during the quarter. The total volume of soil and debris removed this quarter for the entire St. Louis FUSRAP project was about 8,297 yd ³ . (For reference, about 36,835 yd ³ of material was removed from all St. Louis FUSRAP project sites. during Federal Fiscal Year 2015)	



Years and quarters on this chart are based on the Federal Fiscal Year (FFY). For example, FFY 2015 is October 1, 2014, through September 30, 2015.

Work Performed by Department Personnel

DOCUMENT REVIEWS

The Missouri Department of Natural Resources' (department) Federal Facilities Section (FFS) provides technical review on major decision documents, work plans, pre-design investigation reports, remedial designs, and post-remedial action reports.

Comments on document content are submitted to the USACE for response and become part of the public record. Listed below are documents reviewed by the Department during this quarter and documents previously reviewed for which some resolution of comments is pending.

1. "Third Five year Review Report for the FUSRAP St. Louis Sites," Revision 0, dated August 17, 2015.

The department reviewed the draft version of this document. At our request the Missouri Department of Health and Senior Services (DHSS) also reviewed the document. Department comments were transmitted to USACE on Feb. 27, 2015. The department requested more specific information on utility and property owner outreach. We also asked for more frequent contact of entities to prevent miscommunications regarding status of properties. We asked that the document include consideration of interim institutional controls use. The department also recommended adding information on current property status to the tables of properties, and expanded discussions in several sections. We asked for USACE to consider publishing this report on the FUSRAP web pages. DHSS requested that USACE update risk factors in their models consistent with the latest USEPA guidance. USACE considered and responded to comments on the draft version of this document. USACE responses to the Department and DHSS comments were acceptable.

DOCUMENT REVIEWS (CONTINUED)

2. "Remedial Design/Remedial Action Work Description Duchesne Park, Supplement Number 4 to the Remedial Action Work Plan Coldwater Creek Properties; FUSRAP North St. Louis County Sites," Revision B, dated October 5, 2015.

The department requested advance notification prior to backfill. This will allow us to collect independent samples of survey units as they are completed. Our comment was transmitted to USACE on Nov. 18, 2015.



USACE operations at St. Cin Park in Hazelwood. This is a view of completed, partially backfilled, excavation areas and a black fabric barrier segregated area that must be excavated in the near future, once the trees are removed.

SITE OBSERVATIONS

Field personnel conduct site visits to observe and document the status of remedial actions, environmental monitoring, contaminant migration prevention and pre-design investigations. USACE personnel are immediately notified of findings, and reports are filed for public record.

The following site visits were conducted on these dates during this quarter:

SPECIFIC SITES	OCTOBER	NOVEMBER	DECEMBER
North County Sites (HISS/Futura, SLAPS, and Vicinity Properties)	1, 2, 5, 7, 13, 26, 20, 21, 27, 28	18, 19	9, 16, 28
SLDS	13		9

SAMPLING

Samples are obtained by department personnel and shipped to a NELAC certified contract laboratory for analysis. The purposes of sample collection include confirmation of results from USACE remedial actions, storm water controls/treatment, and investigating locations of potential concern.

Department of Natural Resources St. Cin Park Confirmation Sampling

The department obtained 2 confirmation soil samples from completed excavations in St. Cin Park. These samples were taken on Oct. 5. The samples have been analyzed, and analytical results are available upon request. Laboratory analysis did not detect any contaminant concentrations above project remediation goals. USACE backfilled these completed areas and remediation at other survey units in the park continued during the quarter.

Department of Natural Resources Bi-Annual Coldwater Creek and Quarterly FUSRAP Groundwater Monitoring Well Sampling

The department obtained 8 sediment split samples and 8 water split samples of Coldwater Creek at locations between SLAPS and St. Denis Bridge during USACE bi-annual sediment and surface water testing on Oct. 20 and Oct. 21. The samples have been analyzed, and our results are available upon request. No contamination above FUSRAP project remediation goals was found. We also obtained groundwater monitoring split samples at 6 locations during the quarterly groundwater monitoring on Nov. 18 and Nov. 19. The samples have been analyzed, and our results are available upon request. Our sample results will be compared with USACE results, when their information becomes available.

COMMUNITY RELATIONS

Department personnel are available for questions, requests for information or as a means of submitting comments and concerns. It is our goal to encourage community involvement and ensure that the concerns of the citizens of Missouri are addressed. Special requests regarding field oversight, research and presentations are welcome. Contact the Federal Facilities Section at (573) 751-3907 for assistance.

OVERSIGHT COMMITTEE

The St. Louis Oversight Committee meets periodically to get updates on current remediation work, discuss the history of the sites, to be briefed on USACE future plans and provide community feedback to USACE. The St. Louis Oversight Committee last held a public meeting on August 20, 2015, 6-8 PM at the Hazelwood Civic Center East, 8969 Dunn Road, Hazelwood. USACE gave a briefing, St. Louis County Health Department gave an update on their efforts regarding Coldwater Creek health concerns, department staff presented St. Ferdinand Park sampling results which showed no contamination of surface soil above FUSRAP remediation goals at 11 locations near Coldwater Creek. Community activist Kim Visintine presented an update regarding the informal self-report health survey of area residents. The next public meeting of the committee will be Feb. 17, 2015 from 6 PM to 8:30 PM at James J. Egan Civic Center, 1 James J Egan Drive, Florissant. A current contact for the St. Louis Oversight Committee is Carl Chappell at (Cfchappell@sbcglobal.net).

UPCOMING U.S. AGENCY FOR TOXIC SUBSTANCES AND DISEASE REGISTRY (ATSDR) OPEN HOUSE ON COLDWATER CREEK HEALTH ASSESSMENT

ATSDR will hold a second public Open House and poster session on Jan. 26, 2-8 PM at the Jamestown Bluff Branch of the St. Louis County Public Library, 4153 N. Highway 67 in Florissant. The Agency for Toxic Substances and Disease Registry (ATSDR), invites residents living near Coldwater Creek to attend the second in a series of open houses. This Open House is formatted as a "listening session" for ATSDR staff to gather information and health concerns from local Coldwater Creek residents. Residents will learn about the status of the ATSDR Coldwater Creek Public Health Assessment (PHA) being conducted and details about the PHA process. Residents will have the opportunity to meet scientists, ask questions, and discuss their potential exposure concerns. For more information about ATSDR's Coldwater Creek Public Health Assessment in St. Louis, MO, community members can call 1-800-CDC-INFO (232-4636) or visit www.cdc.gov/info. This meeting will be held before this quarterly goes to print, but more open houses are planned by ATSDR in the near future.

REGULATORS COORDINATION MEETINGS

Personnel from USEPA, USACE and the department periodically meet in person and by conference call to discuss site status, document schedules, landowner assistance projects and other similar issues. These coordination meetings are beneficial, as they keep the parties informed of site status, allow for discussion of cleanup issues, and provide coordination of agency activities as they relate to cleanup of the sites. A meeting was held on Oct. 28 during this quarter.

Site Activities This Quarter

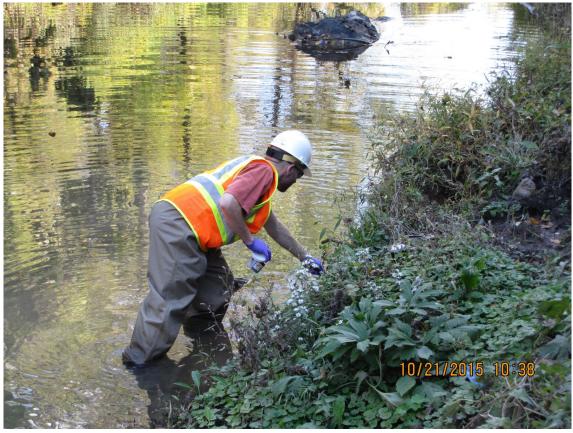
USACE REMEDIAL ACTIONS

NORTH COUNTY

- Characterization sampling of Pershall Rd. was on hold during the quarter. Remediation at St. Cin Park in Hazelwood continued.
- Characterization sampling of Coldwater Creek between Frost Ave. and St. Denis bridge continued. Sampling of residential lawns near St. Cin Park continued.
- Characterization and sampling of businesses and residential areas adjoining Coldwater Creek continued during the quarter.

ST. LOUIS DOWNTOWN SITE

- Plant 6 (Mallinckrodt) excavation of soils underlying building 101 continued during the quarter.
- Utility supports within the SLDS record of decision boundaries were completed during the quarter.
- USACE evaluated additional sampling to complete a remedial investigation addendum to fill data gaps for the Inaccessible Soils Operable Unit Group 2 properties record of decision (ROD) and proposed plan.



The department obtained split samples from USACE during their contractor's bi-annual sampling of Coldwater Creek sediment and surface water on Oct. 20 and Oct. 21. This bi-annual sampling is done to ensure contamination from upstream USACE excavation areas is not impacting the creek.



St. Louis Downtown Sites - Another view of soil excavation at Plant 6/Building 101. This work is currently expected to be completed mid-2016.

Tasks and Goals for Next Quarter

NORTH COUNTY

- USACE characterization sampling of Coldwater Creek between Frost Ave. and St. Denis bridge and residences along Coldwater Creek will continue.
- USACE Pershall Road characterization sampling may be completed. Banshee Rd. additional verification sampling may begin.
- USACE will continue remediation at and near St. Cin Park adjacent to Coldwater Creek.
- USACE may begin work at Duchesne Park or the Archdiocese Property in Florissant during the next quarter if the St. Cin Park remediation is completed.

ST. LOUIS DOWNTOWN SITE

- USACE remediation of DT-2 (City Property) may continue. This work is currently expected to be completed in mid-2016.
- USACE Plant 6/Building 101 area soil excavation will continue. This work is currently expected to be completed mid-2016.
- Support of utility excavation activities at the St. Louis Downtown Sites will continue.
- Additional sampling locations for a remedial investigation addendum may be identified and sampled to fill data gaps for the Inaccessible Soils Operable Unit Group 2 properties ROD and proposed plan.

DOCUMENT REVIEWS

Review of the following documents and data are anticipated during the next quarter.

NORTH COUNTY

- Futura Environmental Covenant Draft
- Coldwater Creek Frost to St. Denis Pre-Design Investigation Report
- Latty Avenue Pre-Design Investigation Report
- Pre-Design Investigation Report and Remedial Design/Remedial Action Work Description Palm Drive adjacent to Coldwater Creek

ST. LOUIS DOWNTOWN SITE

- ESD for Kiesel Hall Street Area Expansion
- Kiesel Riverfront Property Post Remedial Action Report

SITE OBSERVATIONS AND SAMPLING

Our on-going role in providing site observations and sampling investigations will continue as per previous quarters.

DEPARTMENT PROJECTS

Staff will continue to work on committees affiliated with long-term stewardship (LTS), Groundwater and the 5-year review.

LONG-TERM STEWARDSHIP

Long-term stewardship applies to sites and properties where long-term management of contaminated environmental media is necessary to protect human health and the environment over time. This generally includes the establishment and maintenance of physical and legal controls, implementation contractors and authorities, accountability mechanisms, information and data management systems, and other resources. Long-term stewardship will be required for areas of inaccessible contamination at both the North St. Louis County and Downtown Properties located under roads, railroads, buildings and other similar structures deemed by the current owners to be vital or in-use. Institutional controls will also be required for portions of the Downtown Properties where remediation goals are deemed suitable for industrial uses. It is expected that some combination of these physical barriers, deed restrictions on properties, and other controls will be needed for properties with contamination left in place. Completion of the project is expected by 2020; this will be followed by a two-year transitional period to transfer responsibility from the USACE to the U.S. Department of Energy.

Financial Reporting

The department's Hazardous Waste Program submits a financial report separate from this document. The report includes costs incurred during the reporting period with request for reimbursement forms.

Status of Work Completed This Quarter

* USACE Cooperative Agreement funds were not used for all of the staff listed as participating in this training, conference, or meeting.

TRAINING, CONFERENCE OR MEETING	DATES	DEPARTMENTAL STAFF
USACE - Missouri DNR Cooperative Agreement Meeting	10/7	Carey, Moore, Drake
ATSDR Site Visit and Meetings on Coldwater Creek	10/28	Carey, Drake
Coldwater Creek Community Meeting with State Senator Walsh	11/6	Carey, Moore
ATSDR Coldwater Creek PHA Open House	12/2	Carey, Lamons
USACE FUSRAP Public Meeting	12/9	Carey, Moore, Drake, Lamons
Computer Security Training	10/22, 11/26,	Carey, Alexander, Moore*
Regulator Conference Calls, Bi-Weekly Meetings	10/28	Carey, Drake, Anderson, Moore, Alexander